



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/994,758	12/19/1997	KENJI NISHI	XA-7889A-RE	6998

25944 7590 05/16/2003

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

MATHEWS, ALAN A

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/994,758

Applicant(s)

NISHI, KENJI

Examiner

Alan A. Mathews

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 14-39, 41-43, 45, 49-55, 68-70, 72-74, 76, 80-84, 96-99, 101-103, 105, 109-115, 128-142, 189 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1-9, 14-39, 41-43, 45, 49-55, 68-70, 72-74, 76, 80-84, 96-99, 101-103, 105, 109-115, 128-142, 189 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 1997 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 08/377,504.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 43 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 - 9, 14 - 39, 41-43, 45, 49-55, 68-70, 72-74, 76, 80-84, 96-99, 101-103, 105, 109-115, 128-142, and 189 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 35-50 of copending Application No. 09/779,686 in view of the Japanese Patent document 04-196,513. With respect to claim 9 of the instant application, claim 50 of Application No. 09/779,686 discloses on line 1 a scanning exposure apparatus and a first object formed with a pattern. Line 4 of claim 50 of Application No. 09/779,686 discloses a projection optical system and line 5 discloses an exposure beam. Lines 1 and 2 of claim 50 disclose synchronously scanning. Line 14 of claim 50 discloses a first interferometer system (first measuring system) and line 17 of claim 50 discloses a second interferometer system (second measuring system). Lines 24-33 of claim 50 disclose an

Art Unit: 2851

adjusting system. Claim 45 discloses that the movable body is rotatable. Thus, claims 35-50 of Application No. 09/779,686 discloses the invention of claims 9 and 30 of the instant application except for specifically calling the first object with a pattern a "mask" and calling the second object, which has an image projected on it from the first object, a "photosensitive substrate", and also disclosing that the radiation has a slit shaped intensity. The Japanese Patent document 04-196,513 discloses the old and well-known concept of having a first object be a mask and a second object be a substrate. The Japanese Patent document 04-196,513 also discloses a slit shaped irradiation L in figure 6. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the first object of Application No. 09/779,686 be a mask and having the second object of Application No. 09/779,686 be a substrate in view of the Japanese Patent document 04-196,513 for the purpose of producing an accurate product (wafer). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the irradiation in the claims of Application No. 09/779,686 slit shaped in view of Japanese Patent document 04-196,513 for the purpose of more accurate illumination. The differences between the other claims of the instant application and claims 35-50 of Application No. 09/779,686 are obvious modifications.

This is a provisional obviousness-type double patenting rejection.

3. Claims 1 - 9, 14 -39, 41-43, 45, 49-55, 68-70, 72-74, 76, 80-84, 96-99,101-103,105,109-115, 128-142, and 189 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 35-69 of copending Application No. 09/962,334 in view of the Japanese Patent document 04-196,513. With respect

Art Unit: 2851

to claim 9 of the instant application, claim 35 of Application No. 09/962,334 discloses an exposure apparatus having a pattern of an original (which is the mask) projected onto a substrate. Claim 35 further discloses that the original (mask) and the substrate are scanned synchronously. Claim 35 also discloses a first and second stage, one of which is for scanningly moving the original and the other of which is for scanningly moving the substrate. Claim 35 further discloses a measuring means for measuring a deviation of the first stage relative to the second stage. Claim 37 discloses that the measuring means comprises an interferometer. Thus, claims 35-69 of copending Application No. 09/962,334 disclose the invention of claim 9 of the instant application except for disclosing a finely moving stage for finely moving the mask. The Japanese Patent document 04-196,513 discloses finely movable stages 27 and 29 for the purpose of providing more accurate alignment. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the claims 35-69 of copending Application No. 09/962,334 with a finely movable mask stage in view of the Japanese Patent document 04-196,513 for the purpose of more accurate alignment of the mask and the substrate. The differences between the other claims of the instant application and claims 35-69 of Application No. 09/962,334 are obvious modifications.

This is a provisional obviousness-type double patenting rejection.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents on Applicant's PTO 1449 are cited for the same reasons Applicant cited them in his INFORMATION DISCLOSURE STATEMENT.

Art Unit: 2851

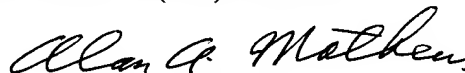
Allowable Subject Matter

5. Claims 1 - 9, 14 -39, 41-43, 45, 49-55, 68-70, 72-74, 76, 80-84, 96-99,101-103,105,109-115, 128-142, and 189 would be allowable subject to filing a proper terminal disclaimer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (703) 308-1706. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Alan A. Mathews
Primary Examiner
Art Unit 2851

AAM
May 14, 2003